

ITC TANK FIRE & RESPONSE DEER PARK, TEXAS

BACKGROUND:

- On Sunday, March 17, 2019, Intercontinental Terminals Company (ITC) discovered a tank of naphtha on fire within a tank farm of 15 tanks. EPA deployed two On-Scene Coordinators (OSCs) to integrate into the existing unified command and provide EPA resources and assets to the response. By the next day multiple tanks were on fire, threatening all the tanks within the farm, as well as other tank farms in close proximity. The initial fire was extinguished on Tuesday, March 19; however, a subsequent fire began on Friday, March 22, as well as a failure of the secondary containment which resulted in a massive spill of thousands of barrels product/fire water/foam into Tucker Bayou and the Houston Ship Channel. A Shelter-in-place was issued for the residents and businesses of Deer Park during the initial fire, as well as the subsequent fire, which resulted in the collapse, burning, or damage to all 15 tanks.

KEY POINTS:

- EPA continues to oversee ITC's response to the tank farm and the Bayou and Ship Channel, coordinating activities with state and local partners, including the Texas Commission on Environmental Quality (TCEQ), U.S. Coast Guard (USCG), Harris County Pollution Control Services.
- EPA responded to the incident deploying key equipment, such as the Airborne Spectral Photometric Environmental Collection Technology aircraft (ASPECT), which was able to fly above the ITC plant during and after the fire and reignitions to ascertain if there was any immediate danger to those downwind from the plant, and the Trace Atmosphere Gas Analyzer (TAGA), a mobile laboratory capable of real-time sampling of outdoor air or emissions. Additionally, EPA conducted hand-held monitoring to determine downwind concentrations of pollutants resulting from the fire and release.
- EPA collected surface water samples to be analyzed for per- and polyfluoroalkyl substances (PFAS), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), chemical oxygen demand (COD), and oil & grease.
- At the height of the response:
 - Over 2,500 federal, state, local, and private personnel were involved in the response and recovery operations;
 - Over 200,000 feet of boom had been deployed to protect sensitive areas and marine docks on the Channel;
 - Approximately 465,000 gallons of foam concentrate had been used for fire-fighting/suppression and emission suppression; and
 - Approximately 340 vessels, including skimming vessels were deployed to conduct product recovery on the water.

During the fires, as well as the response/recovery phase, emissions of benzene from the spilled product continued to cause concern for response workers, neighboring facilities, and communities downwind of the facility. Air monitoring by EPA, TCEQ, Harris County, and ITC were conducted 24-hours a day to provide sufficient data to local officials to assist in making protective action decisions for their communities, as well as ensuring emergency responders were adequately protected.

TALKING POINTS:

- Tank Farm Progress:
 - Currently ITC has removed all the material they are able to remove until the tanks are deconstructed. ITC is planning the mechanical disassembly of tanks 80-14, 80-15, 80-13, 80-10 and 80-7, in that order. These are the tanks with remaining sludge/product that may have benzene vapor emissions.
 - 171,528 barrels of product/water had been recovered from the tank farm;
- Recoverable material has been recovered off the Ship Channel and the SCAT process and shoreline cleanup is nearing completion. Approximately 85% has been approved by Unified Command as meeting endpoint criteria. 125,346 barrels of product/water were recovered from water operations;
- Air monitoring strike teams have collected over 2,000 instantaneous air monitor readings downwind and around the ITC facility and gather more than 300 water samples in the Tucker Bayou and Houston Ship Channel.
- EPA deployed the Trace Atmospheric Gas Analyzer, or TAGA. The TAGA monitored the ambient air in the communities surrounding and downwind of the ITC facility, and as of today, covered over 4,000 miles with more than 500,000 data points in the Houston area.
- During the fire, EPA also utilized the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft for air sampling. ASPECT flew over 26 flights and over 50 hours throughout the area. This data has been invaluable in assessing risks quickly and responding appropriately to this incident. No other parties involved have available technology on par with the ASPECT.
- EPA is utilizing the tools available to us and are taking additional steps to make data available to the public, including the Site Response website. One way we are keeping the public informed is through the Story Map Resource, which was created by EPA, in coordination with the TCEQ. The Story Map shows sampling data by location, allowing the public to see what is being measured in their community. EPA continues to work with our states, local governments, and federal agencies to develop innovative methods to improve each response.



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